

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. **Applicant/Contact name and address:**

MARINERS HAVEN HOMEOWNERS ASSOCIATION
ATTN: SCOTT DOYLE – DIRECTOR
PO BOX 1975
EUREKA MT 59917-1975

2. **Type of action:** Groundwater Application for Beneficial Water Use Permit 76D 30151686

3. **Water source name:** Groundwater

4. **Location affected by project:**

The Mariners Haven subdivision in the S2 Section 11, Township 36N, Range 28W, and the NWNENW Section 14, Township 36N, Range 28W, Lincoln County, Montana.

The Abayance Bay Marina facilities located in the NESW Section 11, Township 36N, Range 28W, Lincoln County, Montana.

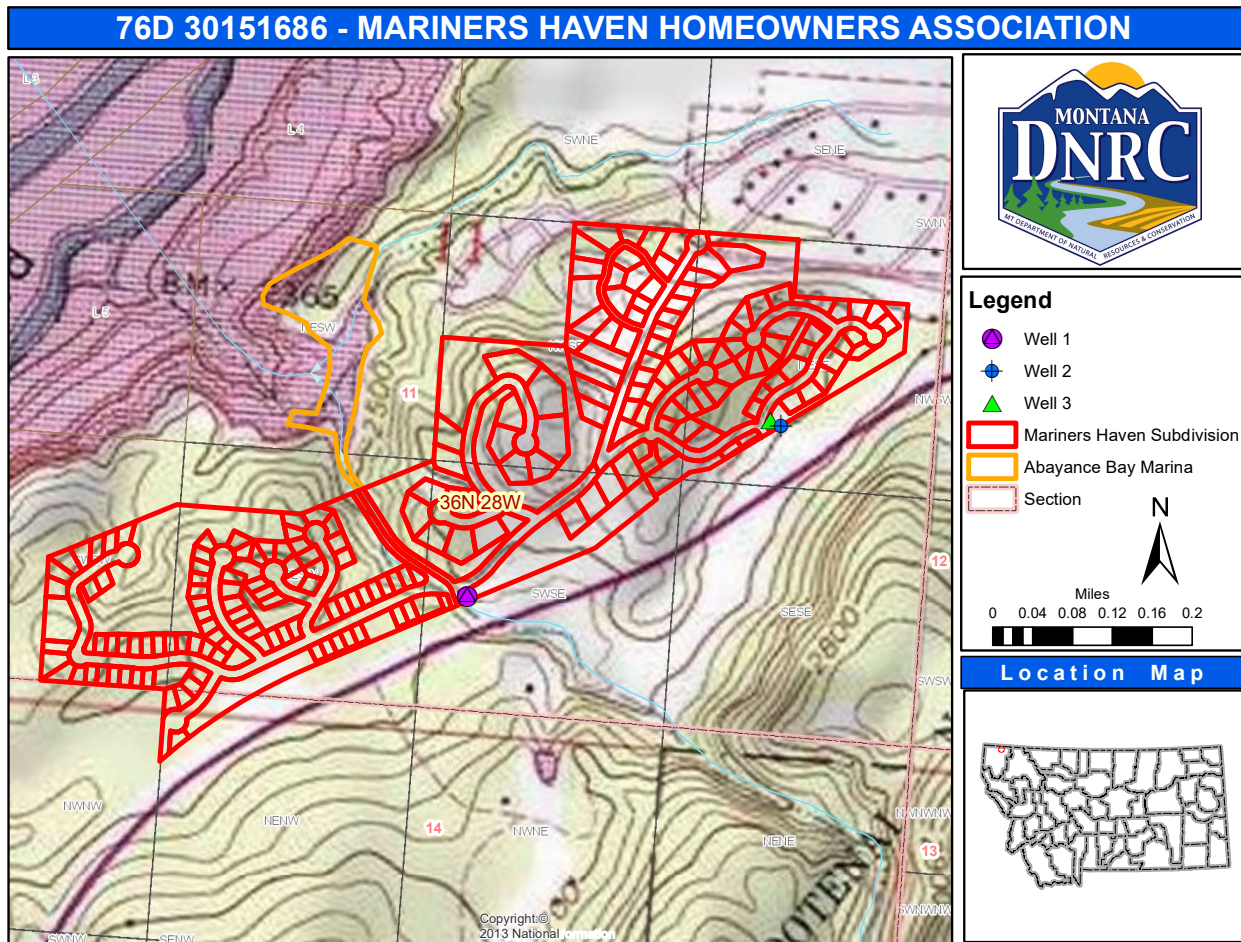


Figure 1. Map of the proposed place of use and point of diversion.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The Applicant proposes to divert groundwater at 225.0 GPM up to 5.48 AF annually by means of a three production wells (Wells 1 – 3, GWIC IDs: 90313, 90314, and 247948, respectively) from January 1 – December 31 for multiple domestic and commercial uses. The Applicant proposes to use a volume of 3.49 AF of water to supply the multiple domestic use for 13 residential lots, and 1.99 AF of water to supply the commercial use associated with marina facilities.

The points of diversion are located in common areas of the Mariners Haven Subdivision. Well 1 is in the NWSWSE Section 11, Township (T) 36N, Range (R) 28W, and Wells 2 and 3 are in the SWNESE Section 11, Township 36N, Range 28W, Lincoln County, Montana (Figure 1). The place of use is the Mariners Haven subdivision in the S2 Section 11, Township 36N, Range 28W, and the NWNENW Section 14, Township 36N, Range 28W, as well as the Abayance Bay Marina facilities located in the NESW Section 11, Township 36N, Range 28W, all in Lincoln County, Montana (Figure 1). The points of diversion are in the Kootenai River Basin (76D) in an area that is not subject to water right basin closures or controlled groundwater area restrictions.

This application seeks to permit water to serve the multiple domestic water needs of the Mariners Haven Subdivision and the commercial water needs of the Abayance Bay Marina. Mariners Haven is a single-family residential development consisting of 193 lots and shared common areas. Platted in 1989, Mariners Haven encompasses a total of 108 acres. Abayance Bay Marina, previously Mariners Haven Marina, encompasses approximately seven acres. The Applicant, via their public water supply system, serves the 193-lot subdivision and the year-round commercial uses associated with the Abayance Bay Marina facilities.

Mariners Haven and Abayance Bay are currently served by Wells 1 – 3, two pump houses, a 20,000-gallon storage tank, and water distribution system. Wells 1 – 3 are 280-feet, 222-feet, and 320-feet deep and were completed on 05 April 1988, 10 December 1988, and 13 October 2008, respectively. The existing water system is listed as a public water supply (PWSID MT0003493) by the Montana Department of Environmental Quality (DEQ).

The existing water system operates under Provisional Permit 76D 72070-00 (issued 14 December 1989) which authorizes a flow rate of 240.0 GPM and a volume of 243.3 AF from Wells 1 – 3 to serve Mariners Haven. Provisional Permit 76D 72070-00 allows for 48.4 AF/year to serve the multiple domestic purpose for 180 homes. The water right was authorized prior to final plat authorization; upon final plat a total of 193 lots were created. In addition to the multiple domestic water use, Provisional Permit 76D 72070-00 authorizes 9.3 AF for seasonal commercial use within the subdivision, and 185.60 AF of lawn and garden irrigation for up to 88.14 acres. Abayance Bay Marina is not within the permitted commercial place of use and requires water year-round, not seasonally.

This application seeks to permit multiple domestic use for the 13 lots that are not adequately accounted for in Provisional Permit 76D 72070-00 and add year-round commercial use to serve the Abayance Bay Marina facilities. In combination, the proposed and existing permits will allow the Applicant to appropriate the water necessary to service Mariners Haven and Abayance Bay Marina. A copy of the water use agreement between Mariners Haven and Lodestone Adventures LLC (Abayance Bay Marina) was provided with the application demonstrating that Mariners Haven has agreed to extend public water supply services to meet the commercial demands at Abayance Bay. The lawn and garden irrigation volume authorized under Provisional Permit 76D 72070-00 is adequate for the development, so no additional volume is sought for this purpose.

The DNRC shall issue a water use permit if the applicant proves the criteria in 85-2-311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:

- U.S. Fish and Wildlife Service (USFWS): National Wetlands Inventory Wetlands Mapper
- Montana Natural Heritage Program: Endangered, Threatened Species, and Species of Special Concern
- Montana Department of Fish Wildlife & Parks (MTDFWP): Dewatered Stream Information
- Montana Department of Environmental Quality (MTDEQ): Clean Water Act Information Center
- U.S. Natural Resources Conservation Service (NRCS): Web Soil Survey

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - *Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

The Applicant will divert groundwater. The Applicant's wells are approximately 0.4 miles from the Kootenai River (Lake Koocanusa), which is interpreted to be the potentially affected surface water source for this application. Lake Koocanusa is not on the MTDFWP list of chronically or periodically dewatered streams.

Determination: No significant impact.

Water quality - *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

According to the MTDEQ 2020 Clean Water Act Information Center Water Quality Information, Lake Koocanusa is listed as "fully supporting" for: primary contact recreation, agriculture, and drinking water. The aquatic life use is listed as "not fully supporting," and "threatened," with the probable causes being Selenium and Flow Regime Modification. Lake Koocanusa's Use Class is "B-1," meaning the waters are classified as suitable for drinking, culinary, and food processing purposes after conventional treatment; bathing, swimming and recreation; growth and propagation of salmonid fishes and associated aquatic life, waterfowl and furbearers; and agricultural and industrial water supply. The Water Quality Category is "5," meaning the waters have one or more beneficial use impaired or threatened, and a total maximum daily load (TMDL) plan is required to address the factors causing the impairment or threat. The proposed project will not affect water quality of Lake Koocanusa.

Determination: No significant impact.

Groundwater - *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

The Applicant will divert groundwater from the local bedrock aquifer at a rate of 225.0 GPM. Wells 1 – 3 are 280-feet, 222-feet, and 320-feet deep and were completed on 05 April 1988, 10 December 1988, and 13 October 2008, respectively. A Department analysis of Applicant supplied data from a 25-hour aquifer test performed at 40.0 GPM on Well 1, a 72-hour aquifer test performed at 185.0 GPM on Well 2, and an 8-hour yield and drawdown test performed at 174.0 GPM on Well 3 concluded that there is a sufficient supply of groundwater in the source aquifer and the hydraulically connected surface water sources to satisfy the proposed appropriation.

The aquifer is hydraulically connected to the Kootenai River (Lake Koocanusa) from Section 11, Township 36N, Range 28W (project location) to Libby Dam. Physical and legal availability and

adverse effect analyses of this source was performed. The Department concluded that surface water quality and the physical/legal supply would not be adversely affected by the proposed groundwater appropriation.

Determination: No significant impact.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

The Mariners Haven/Abayance Bay Marina water system was designed by Montana Licensed Professional Engineer Terence W. Richmond of Morrison-Maierle, Inc. in Kalispell, Montana. The system is a Montana Public Water Supply (PWSID: MT0003493) registered with the Montana DEQ. The system consists of:

- Well 1 (GWIC ID: 90313; completed to a depth of 280-feet below ground surface (BGS) by Stinger Drilling (WWC-325) on 05 April 1988 in the local bedrock aquifer), equipped with a 3.0-hp submersible pump of unknown make and model;
- Well 2 (GWIC ID: 90314; completed to a depth of 222-feet BGS by Stinger Drilling (WWC-325) on 10 December 1988 in the local bedrock aquifer), equipped with a 20.0-hp 6-inch 150STS20D6X-0764 Franklin Electric submersible turbine pump;
- Well 3 (GWIC ID: 247948; completed to a depth of 320-feet BGS by Sudan Drilling (WWC-450) on 13 October 2008 in the local bedrock aquifer), equipped with a 20.0-hp 6-inch 150STS20D6X-0764 Franklin Electric submersible turbine pump;
- Distribution piping and appurtenant valving and controls;
- A 20,000-gallon storage tank with water level float switch;
- Two 5.0-hp centrifugal booster pumps controlled by variable frequency drives (VFD) along with Three Flex Pro H2P35 captive air pressure tanks to help regulate pump cycling;
- A 7.5-hp centrifugal booster pump with a Well-X-Trol WX350 pressure tank to help minimize pump cycling;
- Two pump houses (upper and lower); and,
- A McCrometer MT-103 in-line flowmeter with totalizer (pertinent only to Wells 2-3).

Water will be diverted based on the water demands of the Mariners Haven residents and Abayance Bay Marina. The well pumps are controlled by the water level in the 20,000-gallon storage tank and are currently set to operate with Well 2 and Well 3 running in an alternating pattern. Well 1 is set to always operate when either of the other two wells are operating. When the water level in the tank reaches a set level, the float switch activates the well pumps until the water level is replenished. From the storage tank, water gravity feeds to Abayance Bay Marina and homes below the tank in Mariners Haven Phase II and Phase III. The three booster pumps convey water to the remaining non-gravity fed areas of the subdivision.

Well 1 (GWIC: 90313) was evaluated with a 25-hour aquifer test at 40.0 GPM with the maximum drawdown of 37.0 feet from the static water level (SWL) of 170.0 feet below top of casing (BTC), leaving 73.0 feet of water column above its bottom. Well 2 (GWIC: 90314) was evaluated with a 72-hour aquifer test at 185.0 GPM with the maximum drawdown of 35.2 feet from the SWL of 115.0 feet BTC, leaving 71.8 feet of water column above its bottom. Well 3 (GWIC: 247948) was evaluated with an 8-hour yield and drawdown test at 174.0 GPM with the maximum drawdown of 43.8 feet from the SWL of 124.2 feet BTC, leaving 148.0 feet of water column above its bottom. The water system is

designed to operate with the wells producing up to 225.0 GPM when Wells 1 and 2 are pumping concurrently.

The Applicant anticipates the following total dynamic head (TDH) conditions during operation based on known operating conditions, the system specifications, and pump performance curves:

- Well 1: 40.0 GPM at 390-feet TDH
- Well 2: 185.0 GPM at 302-feet TDH
- Well 3: 175.0 GPM at 322-feet TDH

Discharge from the system occurs as return flows from lawn and garden irrigation and as discharge from a combination of individual and shared septic drain fields, and the Town of Rexford wastewater treatment system.

Based on the results of the 25-hour and 72-hour constant-rate aquifer tests, the 8-hour yield and drawdown test, anticipated TDH conditions, and the pump performance and system specifications, the Department finds that the diversion and conveyance system is adequate to supply the requested annual volume of 5.48 AF at a flow rate 225.0 GPM.

This project will not create any channel impacts, flow modifications, barriers, dams, or riparian impacts to Whitefish Lake, nor will it affect any wells.

Determination: No significant impact.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants, aquatic species, or any “species of special concern,” or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or “species of special concern.”*

The Montana Natural Heritage Program website was reviewed to determine if there are any threatened or endangered fish, wildlife, plants, aquatic species, or any “species of special concern” in Township 36N, Range 28W that could be impacted by the proposed project. 27 animal and one plant species of concern (Tables 1 and 2, respectively) were identified within the township and range where the project is located. Of these species, the Grizzly Bear (*Ursus arctos*), Canada Lynx (*Lynx canadensis*), and the Bull Trout (*Salvelinus confluentus*) are listed as threatened by the USFWS. An adequate quantity of water will still exist in the surface water source to maintain existing populations of Bull Trout, should they exist there currently. This area is already highly developed, and it is not anticipated that any species of concern will be further impacted by the proposed project.

Table 1. Animal Species of Concern			
Black-backed Woodpecker (<i>Picoides arcticus</i>)	Evening Grosbeak (<i>Coccothraustes vespertinus</i>)	Long-legged Myotis (<i>Myotis volans</i>)	Townsend's Big-eared Bat (<i>Corynorhinus townsendii</i>)
Brown Creeper (<i>Certhia americana</i>)	Fisher (<i>Pekania pennanti</i>)	Northern Goshawk (<i>Accipiter gentilis</i>)	Varied Thrush (<i>Ixoreus naevius</i>)
Bull Trout (<i>Salvelinus confluentus</i>)	Flammulated Owl (<i>Psiloscops flammeolus</i>)	Northern Leopard Frog (<i>Lithobates pipiens</i>)	Western Skink (<i>Plestiodon skiltonianus</i>)
Canada Lynx (<i>Lynx canadensis</i>)	Grizzly Bear (<i>Ursus arctos</i>)	Pacific Wren (<i>Troglodytes pacificus</i>)	Western Toad (<i>Anaxyrus boreas</i>)
Cassin's Finch (<i>Haemorhous cassinii</i>)	Hoary Bat (<i>Lasiurus cinereus</i>)	Pileated Woodpecker (<i>Dryocopus pileatus</i>)	Westslope Cutthroat Trout (<i>Oncorhynchus clarkii lewisi</i>)
Clark's Nutcracker (<i>Nucifraga columbiana</i>)	Long-eared Myotis (<i>Myotis evotis</i>)	Sheathed Slug (<i>Zacoleus idahoensis</i>)	Wolverine (<i>Gulo gulo</i>)
Pygmy Slug (<i>Kootenaia burkei</i>)	Torrent Sculpin (<i>Cottus rhotheus</i>)	Pale Jumping-slug (<i>Hemphillia camelus</i>)	

Table 2. Plant Species of Concern
Douglas Bladderpod (<i>Physaria douglasii</i> / <i>Lesquerella douglasii</i>)

Determination: No significant impact.

Wetlands - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

A 7.78 acre forested/shrub riparian area exists near Abayance Bay Marina. The issuance of a water use permit for commercial water uses at the marina will not impact this riparian area.

Determination: No significant impact.

Ponds - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: N/A, project does not involve ponds.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

The proposed multiple domestic and commercial uses will not negatively impact the soil quality, stability, or moisture content. The soil types in the project area are Typic Eutrochrepts, moraines, formed from calcareous gravelly till, and Canusa sandy loam, 1 to 20 percent slopes, formed from eolian sands. These soils have a moderately high to high, and a high capacity to transmit water, respectively. Soils in this area are not likely susceptible to saline seep.

Determination: No significant impact.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

This area is already developed, and any existing native vegetation has already been disturbed. It is not anticipated that issuance of a water use permit will contribute to the establishment or spread of noxious weeds in the project area. Noxious weed prevention and control will be the responsibility of the landowners, who must follow local noxious weed regulations.

Determination: No significant impact.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

There will be no impact to air quality associated with issuance of the proposed permit for beneficial use of surface water.

Determination: No significant impact.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

The Abayance Bay Marina facility operates on US Forest Service land under a special use permit from the Federal Government. It is the responsibility of the permittee to comply with the stipulations of their special use permit. The issuance of a water use permit will not degrade any unique archeological or historical sites in the vicinity of Abayance Bay Marina.

Determination: No significant impact.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water, and energy not already addressed.*

All impacts to land, water, and energy have been identified. No further impacts are anticipated.

Determination: No significant impact.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

The project is consistent with planned land uses.

Determination: No significant impact.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

The proposed project will not inhibit, alter, or impair access to present recreational opportunities in the area. The project is not expected to create any significant pollution, noise, or traffic congestion in the area that may alter the quality of recreational opportunities. The proposed place of use and diversion do not exist on land designated as wilderness.

Determination: No significant impact.

HUMAN HEALTH - *Assess whether the proposed project impacts human health.*

This proposed use will not adversely impact human health.

Determination: No significant impact.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*

Yes___ No X *If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.*

Determination: No impact.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

- (a) Cultural uniqueness and diversity? None identified.
- (b) Local and state tax base and tax revenues? None identified.
- (c) Existing land uses? None identified.
- (d) Quantity and distribution of employment? None identified.
- (e) Distribution and density of population and housing? None identified.
- (f) Demands for government services? None identified.
- (g) Industrial and commercial activity? None identified.
- (h) Utilities? None identified.
- (i) Transportation? None identified.
- (j) Safety? None identified.
- (k) Other appropriate social and economic circumstances? None identified.

2. ***Secondary and cumulative impacts on the physical environment and human population:***

Secondary Impacts: None identified.

Cumulative Impacts: None identified.

3. ***Describe any mitigation/stipulation measures:***

None.

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:***

The only alternative to the proposed action would be the no action alternative. The no action alternative would not authorize the diversion of groundwater.

Part III. Conclusion

1. ***Preferred Alternative***

Issue a water use permit if the Applicants prove the criteria in 85-2-311 MCA are met.

2. ***Comments and Responses***

None.

3. ***Finding:***

Yes ___ No X Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

No significant impacts related to the proposed project have been identified.

Name of person(s) responsible for preparation of EA:

Name: Travis Wilson

Title: Water Resource Specialist

Date: 18 August 2022